

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An optical mouse, comprising:

a housing having an accommodation space formed therein;

a printed circuit board arranged in the accommodation space of the housing;

a light source unit having different colors of image light sources, wherein the light source unit is disposed on the printed circuit board;

a photodetector unit disposed on the printed circuit board, wherein the photodetector unit is opposite to the light sources;

a light-guiding unit arranged in the accommodation space of the housing, wherein the light-guiding unit is adjacent to the light source unit for guiding a non-complementary color light relative to a reflection surface from one of the image light sources to the reflection surface, and the light-guiding unit further has a plurality of light receiving surfaces non-coplanarly connected to one another and in correspondence with the light sources, respectively; and

a lens unit arranged in the accommodation space of the housing, wherein the lens unit is positioned below the photodetector unit for converging a reflected light reflected by the reflection surface into the photodetector unit.
2. (Original) The optical mouse of claim 1, wherein the light source unit includes a red LED, a green LED and a blue LED.
3. (Original) The optical mouse of claim 1, wherein the light source unit is a LED with at least two different colors of light chips.
4. (Original) The optical mouse of claim 1, wherein the printed circuit board has a light hole for allowing reflected light converged by the lens unit to pass therethrough, the light

source unit and the photodetector unit are respectively arranged on two opposite sides of the light hole on the printed circuit board, and the light guiding unit is upwardly extended through the light hole to face the light source unit.

5. (Original) The optical mouse of claim 1, wherein the printed circuit board has a light hole, and the lens unit is upwardly extended through the light hole to face the photodetector unit.

6. (Cancelled).

7. (Original) The optical mouse of claim 1, wherein the lens unit has a coupling portion for coupling with an end of the light-guiding unit.

8. (Original) The optical mouse of claim 1, wherein the light source unit has an arcuate shape formed at a front end thereof.

9. (Original) The optical mouse of claim 1, wherein the light-guiding unit has at least one light-receiving surface and a light-exiting surface positioned at an opposite end of the light-receiving surface, and an area of the light-receiving surface of the light-guiding unit is larger than that of the light-exiting surface for enabling light to carry a brightest image formed on the reflection surface.

10. (New) An optical mouse, comprising:

- a housing having an accommodation space formed therein;
- a printed circuit board arranged in the accommodation space of the housing;
- a light source unit having different colors of image light sources, wherein the light source unit is disposed on the printed circuit board;

a photodetector unit disposed on the printed circuit board, wherein the photodetector unit is opposite to the light sources;

a light-guiding unit arranged in the accommodation space of the housing, wherein the light-guiding unit is adjacent to the light source unit for guiding a non-complementary color light relative to a reflection surface from one of the image light sources to the reflection surface, and the light-guiding unit further has at least one light-receiving surface and a light-exiting surface positioned at an opposite end of the light-receiving surface, and an area of the light-receiving surface of the light-guiding unit is larger than that of the light-exiting surface for enabling light to carry a brightest image formed on the reflection surface; and

a lens unit arranged in the accommodation space of the housing, wherein the lens unit is positioned below the photodetector unit for converging a reflected light reflected by the reflection surface into the photodetector unit.

11. (New) The optical mouse of claim 10, wherein the light source unit includes a red LED, a green LED and a blue LED.

12. (New) The optical mouse of claim 10, wherein the light source unit is a LED with at least two different colors of light chips.

13. (New) The optical mouse of claim 10, wherein the printed circuit board has a light hole for allowing reflected light converged by the lens unit to pass therethrough, the light source unit and the photodetector unit are respectively arranged on two opposite sides of the light hole on the printed circuit board, and the light guiding unit is upwardly extended through the light hole to face the light source unit.

14. (New) The optical mouse of claim 10, wherein the printed circuit board has a light hole, and the lens unit is upwardly extended through the light hole to face the photodetector unit.

15. (New) The optical mouse of claim 10, wherein the light-guiding unit has a plurality of light receiving surfaces non-coplanarly connected to one another and in correspondence with the light sources, respectively.

16. (New) The optical mouse of claim 10, wherein the lens unit has a coupling portion for coupling with an end of the light-guiding unit.

17. (New) The optical mouse of claim 10, wherein the light source unit has an arcuate shape formed at a front end thereof.